From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: AVECUALITY NOTIFICATION OF TRANSMITTAL OF SPECIAL INTERNATIONAL PRELIMINARY REVELL, Christopher Avecia Limited INTERNATIONAL PRELIMINARY Intellectual Property Group **EXAMINATION REPORT** RECEIVED Hexagon House, P.O. Box 42 12 MNR 2004 Blackley, Manchester M9 8ZS GRANDE BRETAGNE (PCT Rule 71.1) Date of mailing (day/month/year) 10/03/2004 Applicant's or agent's file reference IMPORTANT NOTIFICATION SMC 60475/WO International application No. International filing date (day/month/year) Priority date (day/month/year) 19/03/2003 PCT/GB03/01161 21/03/2002 **Applicant** AVECIA BIOTECHNOLOGY INC. et al.

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the 2. elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but 3. not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/

European Patent Office D-80298 Munich

Tel. (+49-89) 2399-0, Tx: 523656 epmu d

Fax: (+49-89) 2399-4465

Authorized officer

MORENO R A

Tel. (+49-89) 2399 2828



PCT

REQUEST

For receiving Office use only	_
International Application No.	
International Filing Date	
	_
Name of receiving Office and "PCT International Application"	

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.	Name of receiving Off	fice and "PCT International Application"
	Applicant's or agent's (if desired) (12 charact	file reference ers maximum) SMC 60475/WO
Box No. I TITLE OF INVENTION PURIFICATION METHODS FOR OLIGONUCLI	EOTIDES AND TI	HEIR ANALOGS
Box No. II APPLICANT This person	is also inventor	
Name and address: (Family name followed by given name; for a legal enti The address must include postal code and name of country. The country of th Box is the applicant's State (that is, country) of residence if no State of residence	te address indicated in this	Telephone No.
Avecia Biotechnology Inc		Facsimile No.
155 Fortune Blvd Milford		Teleprinter No.
Massachusetts 10757 USA	:	Applicant's registration No. with the Office
State (that is, country) of nationality: US	State (that is, country)	of residence:
This person is applicant for the purposes of: all designated the United States all designated the United States	States except	the United States of America only the States indicated in the Supplemental Box
Box No. III FURTHER APPLICANT(S) AND/OR (FURTH	IER) INVENTOR(S)	
Name and address: (Family name followed by given name: for a legal entity. The address must include postal code and name of country. The country of the Box is the applicant's State (that is, country) of residence if no State of residence Avecia Limited Hexagon House Blackley, Manchester, M9 8ZS United Kingdom	e address indicated in this	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office
State (that is, country) of nationality: GB	State (that is, country) GB	of residence:
		he United States of America only the States indicated in the Supplemental Box
Further applicants and/or (further) inventors are indicated on	a continuation sheet.	
Box No. IV AGENT OR COMMON REPRESENTATIVE;	OR ADDRESS FOR	CORRESPONDENCE
The person identified below is hereby/has been appointed to act on of the applicant(s) before the competent International Authorities a	s:	gent common representative
Name and address: (Family name followed by given name: for a legal entity, The address must include postal code and name of cou REVELL, Christopher	ntry.)	Telephone No. +44 161 721 1142
Avecia Limited.		Facsimile No. +44 161 721 5801
Intellectual Property Group, PO Box 42,	. 1	Teleprinter No.
Hexagon House, Blackley, Manchester M9 82	Agent's registration No. with the Office	
United Kingdom		Sem Stegistration to, with the Office
Address for correspondence: Mark this check-box where no space above is used instead to indicate a special address to what the special address the special address to what the special address to what the special address to what the special address the special address to what the special address the	o agent or common repre- hich correspondence sho	esentative is/has been appointed and the buld be sent.

Sheet No. ...?...

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)					
If none of the following sub-boxes is used, this sheet should not be included in the red. Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) JOHANSEN, Jack T 22 Partridge Lane Concord			ian This person is:		
Massachusetts 01 USA	Applicant's registration No. with the Office				
State (that is, country) of na US	tionality:		State (that is, cou	ntry) of residence:	
This person is applicant for the purposes of:	all designated States	all designated the United Sta	States except tes of America	the United States of America only the Supplemental Box	
Name and address: (Family n The address must include postal Box is the applicant's State (that	code and name of cour	itry. The country of the	e address indicated in t	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.) Applicant's registration No. with the Office	
State (that is, country) of nat	ionality:		State (that is, cour	ntry) of residence:	
This person is applicant for the purposes of:	all designated States	all designated the United State	States except es of America	the United States of America only the States indicated in the Supplemental Box	
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This person is applicant for the purposes of:	all designated States	all designated State	States except es of America	the United States the States indicated in the Supplemental Box	
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This person is applicant for the purposes of	all designated States	all designated S the United State	tates except es of America	the United States the States indicated in the Supplemental Box	
Further applicants and	or (further) invento	rs are indicated on	another continuațio	on sheet.	

Box No.	. V DESIGNATION OF STATI	ES	Mark the applicable check-boxes belo	w; at t	least one must be marked.
The foll	owing designations are hereby mad	e under	Rule 4.9(a)·		
1	al Patent				
_	ARIPO Patent: GH Ghana, C	SM Gar	nbia, KE Kenya, LS Lesotho, My	W Ma	lawi, MZ Mozambique, SD Sudar Zambia, ZW Zimbabwe, and any othe
	State which is a Contracting State specify on dotted line)	te of the	Harare Protocol and of the PCT (if	other i	kind of protection or treatment desired
⊠ EA	Eurasian Patent: AM Armenia,	AZ Azer istan, TN	baijan, BY Belarus, KG Kyrgyzstan	. KZ K	Kazakhstan, MD Republic of Moldova n is a Contracting State of the Eurasia
⊠ EP	Republic, DE Germany, DK Deni IE Ireland, IT Italy, LU Luxembo	mark, El ourg, MC	E Estonia, ES Spain, FI Finland, FF	R Francigal, S	I Liechtenstein, CY Cyprus, CZ Czec ce, GB United Kingdom, GR Greece E Sweden, SI Slovenia, SK Slovakia Convention and of the PCT
⊠ OA	OAPI Patent: BF Burkina Faso, GA Gabon, GN Guinea, GQ Equ TD Chad, TG Togo, and any other	BJ Ben atorial C r State w	in, CF Central African Republic, Co Guinea, GW Guinea-Bissau, ML Ma	G Con Ili, MI a Con	go, CI Côte d'Ivoire, CM Cameroon R Mauritania, NE Niger, SN Senegal tracting State of the PCT (if other kin
Nationa			ntment desired, specify on dotted line):		
	United Arab Emirates				NZ New Zealand
			Croatia	130	OM Oman
	Albania	₩ н	Hungary	X	PH Philippines
M AM	Armenia	DE ID	Indonesia	₩ ₽	L Poland
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	Azerbaijan				RU Russian Federation
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47					
BG B	Bulgaria	X KC	Kenya	DXI s	D Sudan
BR E	Brazil	₩ KP	Democratic People's Republic	M s	F Sweden
BY B	Belarus	***	of Korea	DXI s	C Singapore
			Republic of Korea	IXI s	K Slovakia
X CA C					L Sierra Leone
•	LI Switzerland and Liechtenstein	DE LC	Saint Lucia		J Tajikistan
	China				M Turkmenistan
			Liberia		N Tunisia
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	nited Kingdom	ISS IVEV	/Malawi	KAJ Y	U Yugoslavia
	renada	MX	Mexico		A South Africa
M GE G	eorgia	MZ MZ	Mozambique		
LEU GH G	hana	M NO	Norway	K Z	W Zimbabwe
Check-box	xes below reserved for designating	States w	hich have become party to the PCT a	fter is	suance of this sheet
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		$\overline{\Box}$		Π	••••••
other design excluded f any design	gnations which would be permitted rom the scope of this statement. The lation which is not confirmed before	i under t applicate the exp	he PCT except any designation(s) in nt declares that those additional desig iration of 15 months from the priority	ndicate mation y date	cant also makes under Rule 4.9(b) all and in the Supplemental Box as being as are subject to confirmation and that is to be regarded as withdrawn by the coffice within the 15-month time limit.)

Supplemental Box

If the Supplemental Box is not used, this sheet should not be included in the request.

- 1. If, in any of the Boxes, except Boxes Nos. VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No..." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
- (i) if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
- (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
- (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
- (v) if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;
- (vi) if, in Box No. VI, there are more than five earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.
- 2. If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.

Continuation of Boxes II and III

Avecia Biotechnology Inc - Applicant for all of the designated states except US (United States of America) and MN (Mongolia)

Avecia Limited - Applicant for MN (Mongolia) only.

Continuation of Box IV

FAWKES, David Melville GAIRNS, Raymond Stevenson LOCKE, Timothy John MAYALL, John MORPETH, Fraser Forrest PARLETT, Peter Michael SCHMITT, Maja SHELLER, Alan

All of Intellectual Property Group, Avecia Limited, PO Box 42, Hexagon House, Blackley, Manchester M9 8ZS, United Kingdom

Sheet	No	5
SHEEL	INU.	

Box No. VI PRIORIT	Y CLAIM				
The priority of the followi	ng earlier application(s) is here	eby claimed:			
Filing date	Number	,	Where earlier application	is:	
of earlier application (day/month/year) of earlier application		national application: country or Member of WTO	regional application:* regional Office	international application receiving Office	
item (1) 21/03/2002 21 March 2002	60/367060	us			
item (2)					
item (3)					
item (4)					
item (5)	<u> </u>				
Further priority claims	s are indicated in the Suppleme	ental Box.			
if the earlier application was	uested to prepare and transmit to sfiled with the Office which for	to the International Bureau the purposes of this internal	a certified copy of the extinual application is the re	arlier application(s) (only ecciving Office) identified	
above as: all items item	(1) item (2)	item (3) item ((4) item (5)	other, see Supplemental Box	
* Where the earlier applicate Industrial Property or one N	tion is an ARIPO application, in Member of the World Trade Org	ndicate at least one country ganization for which that ed	party to the Paris Conver arlier application was file	ntion for the Protection of ed (Rule 4.10(b)(ii)):	
Box No. VII INTERNA	TIONAL SEARCHING AUT	THORITY			
	earching Authority (ISA) (if the two-		earching Authorities are c	ompetent to carry out the	
	arlier scarch; reference to th	nat search (if an earlier sea	arch has been carried out	by or requested from the	
International Searching Auth Date (day/month/year)	hority): Numbe		ry (or regional Office)	oy or requesically on the	
Box No. VIII DECLARA	TIONS		· · · · · · · · · · · · · · · · · · ·		
The following declarations check-boxes below and indicate.	are contained in Boxes Nos. Vate in the right column the number	VIII (i) to (v) (mark the ap ber of each type of declarat	plicable tion):	Number of declarations	
Box No. VIII (i)	Declaration as to the identity	of the inventor		:	
Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent				
Box No. VIII (iii)		Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application :			
Box No. VIII (iv)	Declaration of inventorship United States of America)	Declaration of inventorship (only for the purposes of the designation of the United States of America)			
Box No. VIII (v)	Declaration as to non-prejud	licial disclosures or except	ions to lack of novelty	·: .	

Sheet	No	•	6
SHEEL	13(1)		

Box No. IX CHECK LIST; LANGUAGE	OF FILING		
This international application contains: (a) in paper form, the following number of sheets: request (including declaration sheets) : 6 description (excluding sequence listings and/or tables related thereto) : 15 claims : 3 abstract : 1 drawings : 25 sequence listings : 1 tables related thereto : (for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form: see (c) below) Total number of sheets : 26 (b) only in computer readable form (Section 801(a)(i)) (i) sequence listings (ii) tables related thereto Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the sequence listings: Diskette, 1 tables related thereto:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item): 1. fee calculation sheet 2. original separate power of attorney 3. original general power of attorney 4. copy of general power of attorney; reference number, if any: 5. statement explaining lack of signature 6. from priority document(s) identified in Box No. VI as item(s): 7. translation of international application into (language): 8. separate indications concerning deposited microorganism or other biological material 9. sequence listings in computer readable form (indicate type and number of carriers) (i) copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) (iii) (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter (iii) together with relevant statement as to the identity of the copy copies with the sequence listings mentioned in left column 10. tables in computer readable form related to sequence listings (indicate type and number of carriers) (i) copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) (ii) (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) (iii) (only where check-box (b)(iii) or (c)(iii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) only copies with the tables mentioned in left column	: 1 : 1 :	
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	11. other (specify):	:	
Figure of the drawings which should accompany the abstract:	Language of filing of the international application:		
Next to each signature/indicate the name of the person sign	T, AGENT OR COMMON REPRESENTATIVE ing and the capacity in which the person signs (if such capacity is not obvious from reading	the request).	
For Avecia Biotechnology Inc. & Avecia	Limited - JOHANSEN Jack T		
,	For receiving Office use only		
Date of actual receipt of the purported international application:	2. Draw	ings:	
Corrected date of actual receipt due to later by timely received papers or drawings completin the purported international application:	g		
4. Date of timely receipt of the required corrections under PCT Article 11(2):	not r	eceived:	
5. International Searching Authority (if two or more are competent): ISA /	6. Transmittal of search copy delayed until search fee is paid		
	For International Bureau use only		
Date of receipt of the record copy by the International Bureau:			